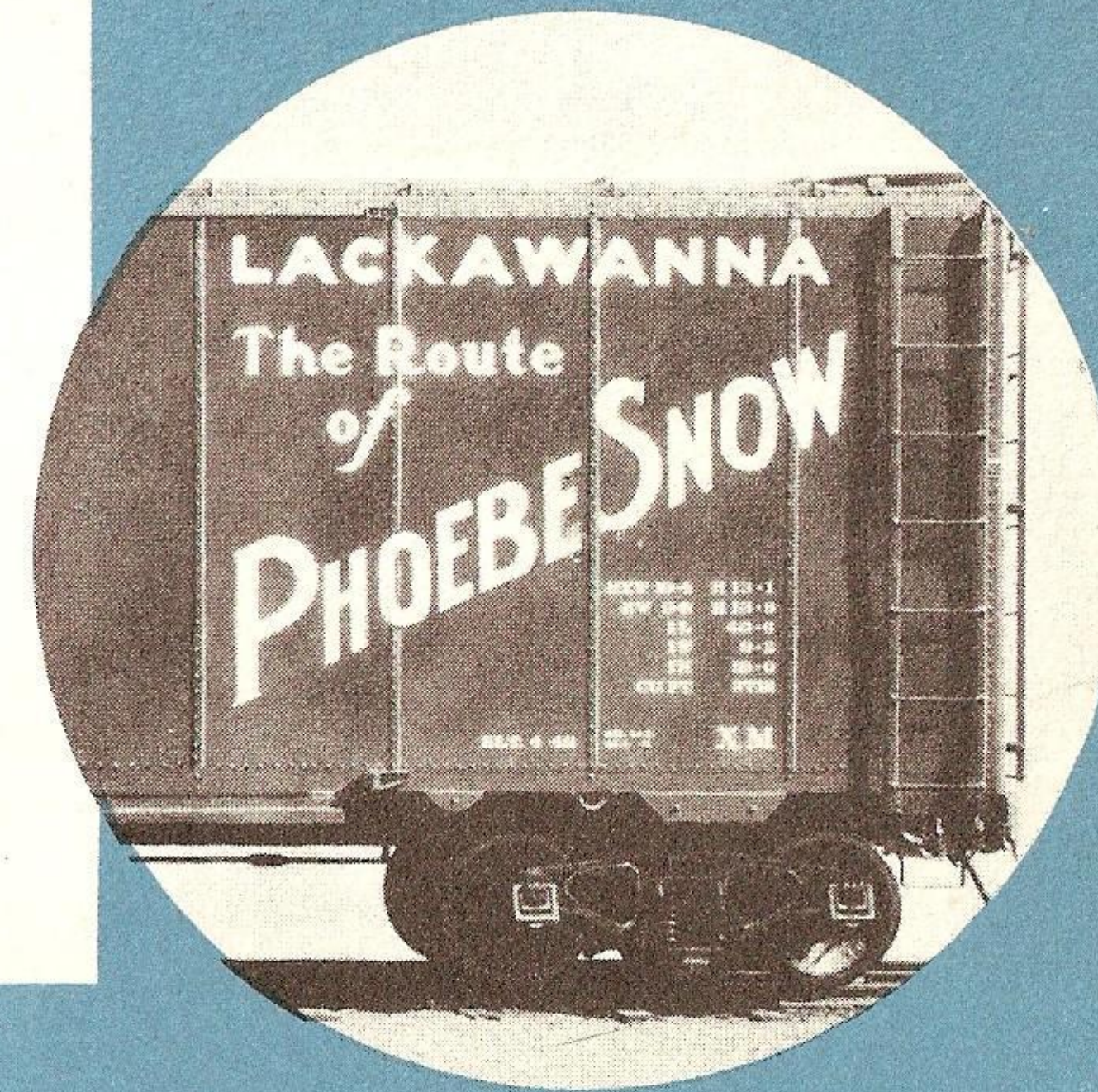
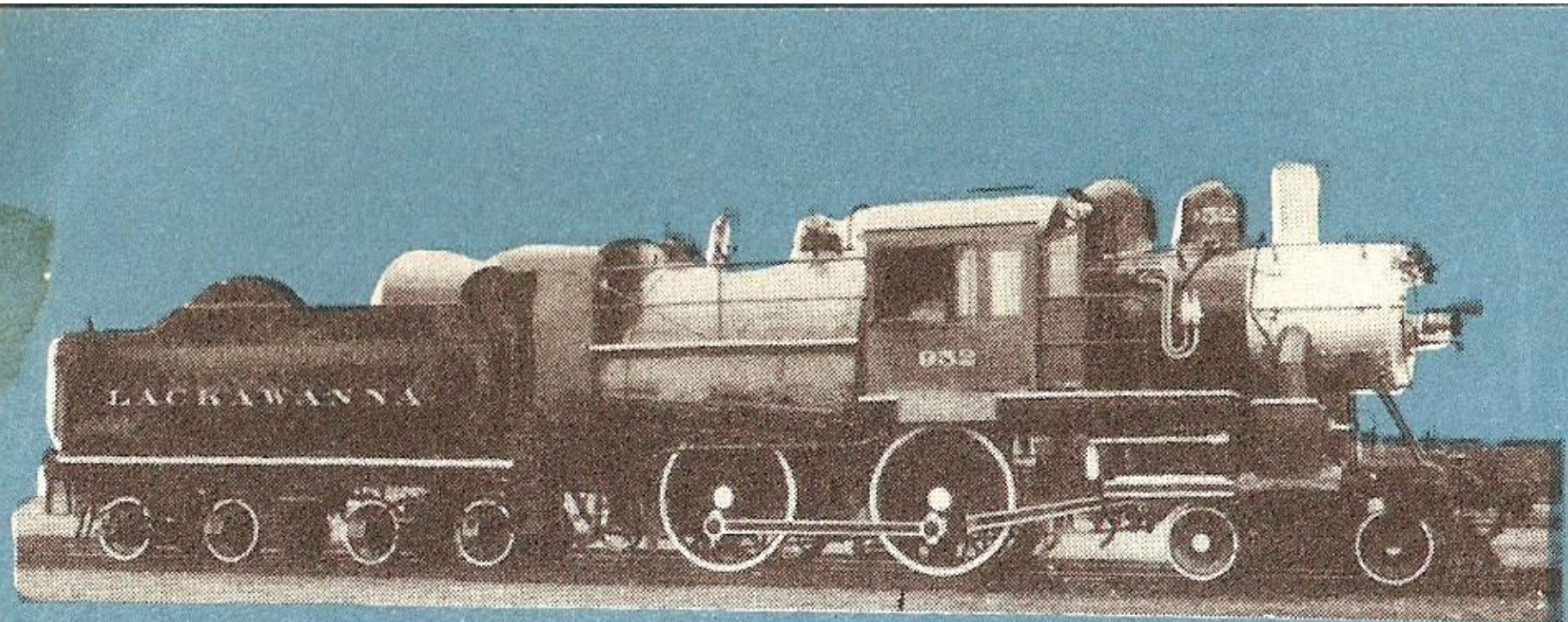


Lackawanna

THE ROUTE OF PHOEBE SNOW

**Brief History of the Railroad with Photographs
and Description of its Motive Power**





No. 952 — Memento of the Past

The Lackawanna Railroad is recognized as a famous scenic route of the East. Its reputation for service, both passenger and freight, is an enviable one.

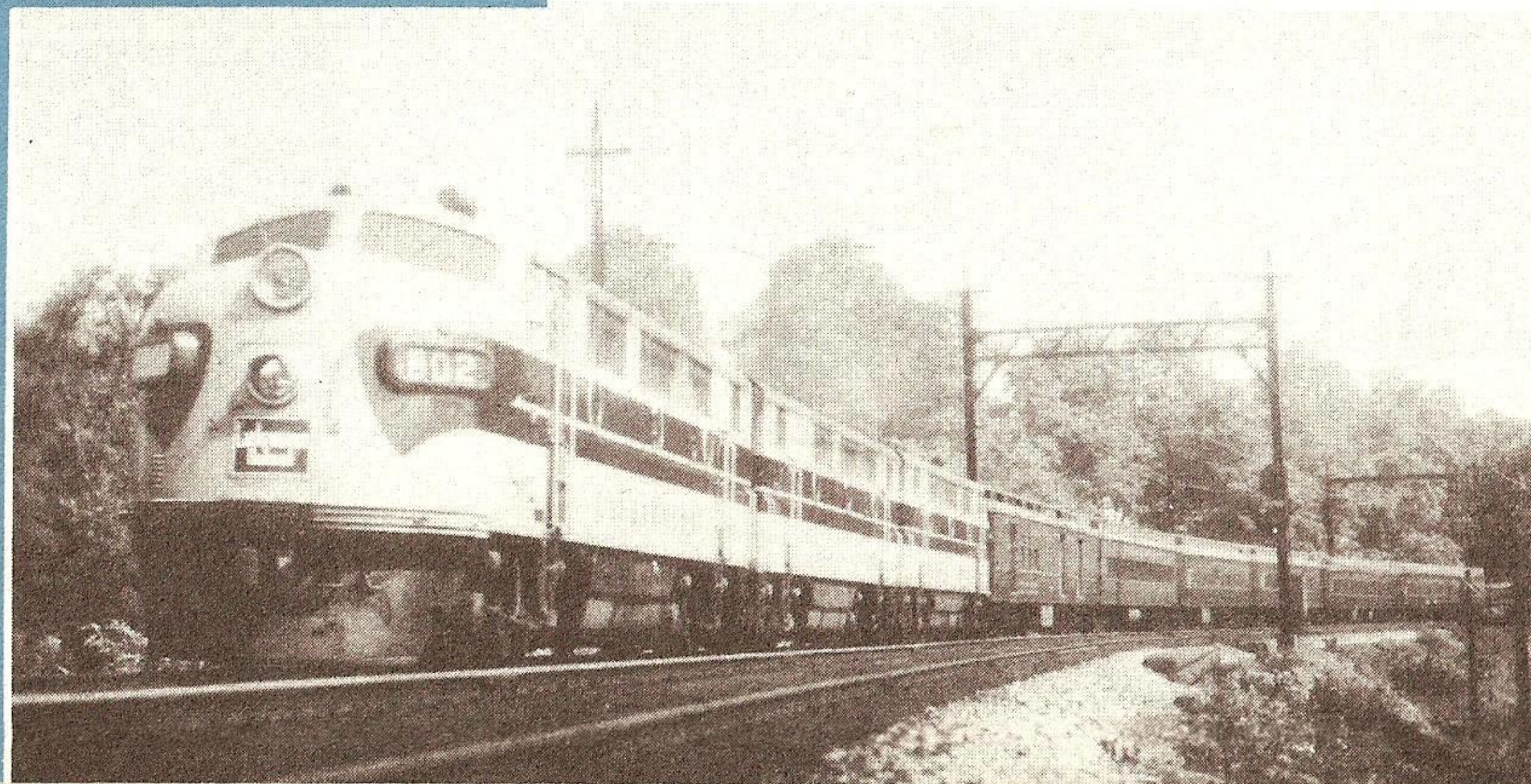
The picturesque valleys and impressive mountains along the Route of

Phoebe Snow possess a special appeal for travelers, attracting vacationists the year around.

The appealing geographical formations, with all their beauty, provide problems of operation for the Lackawanna. Tremendous power is needed to haul heavy, modern passenger and freight trains over the Poconos.

To overcome numerous curves, grades and other natural obstacles, and to maintain fast schedules for through traffic, the Lackawanna has followed the wise policy of maintaining its motive power at maximum effectiveness.

Locomotives have been designed and built to serve the unique needs of the Lackawanna and its patrons.



4,500 h.p. Diesel locomotives, hauling all through passenger trains.

THE DELAWARE LACKAWANNA AND WESTERN RAILROAD COMPANY

The main line of the Lackawanna Railroad extending from tide-water at Hoboken, N. J., to Buffalo—a distance of 396 miles—is the shortest rail route between New York and Buffalo. This railroad, traversing the states of New Jersey, Pennsylvania and New York, serves such famed regions as the great commercial center of New York City, northern New Jersey, the celebrated Delaware Water Gap, Pocono Mountains, the anthracite regions of northeastern Pennsylvania, the Finger Lakes country of the Southern Tier counties of New York, and the vast Great Lakes territory adjacent to Buffalo. With this panorama unfolding before his eyes, the traveler journeying between New York and Buffalo can readily appreciate the significance of the title, “the Route of Scenic Charm.”

The History of the Road

When the Ligget's Gap Railroad, the first link in the system, was opened to traffic in 1851, it was intended to be a local road that would develop the anthracite industry. This line extended from New Providence (Scranton), Pa., to Great Bend (Hallstead), Pa., where by interchange agreement the tracks of the New York and Erie Railroad were used to Owego.

In the same year, 1851, the Company acquired by lease the Cayuga and Susquehanna Railroad, extending from Owego to Lake Cayuga. Thus, by using a connection with the Erie Canal at the north end of Lake Cayuga, an outlet to the east and west was provided for the ship-



ment of coal. In that year the name was changed to Lackawanna and Western Railroad Company.

In 1850, the Delaware and Cobb's Gap Railroad Company was chartered to construct a line from Cobb's Gap to a point "at or near Delaware Water Gap." Two years later construction was begun and the road was combined with the Ligget's Gap Railroad.

Legislative sanction was secured in 1852 to connect with the Warren Railroad of New Jersey (Water Gap to Hampton, N. J.) and in 1857 this property was leased to the Lackawanna. At Hampton, connection was made with the Central Railroad of New Jersey, providing direct rail access to the eastern seaboard.

The Morris and Essex Railroad, which operated the Newark and Bloomfield, was leased in perpetuity by the Lackawanna, in 1868. This acquisition, which was later extended to Hoboken, connected with the Warren, at Washington, N. J., and it enabled the Company to dis-

continue routing via the Central Railroad of New Jersey to the Atlantic seaboard.

The road as it existed in the early 1870's extended from Hoboken to Great Bend, a distance of 188 miles. In addition, there was the Cayuga and Susquehanna, running from Owego to Ithaca, which, as previously stated, was reached by using the tracks of the New York and Erie between Great Bend and Owego.

Stock control of the Syracuse, Binghamton and New York Railroad, extending from Binghamton to Syracuse, was acquired in January, 1869; and, in September, 1912, that railroad was leased by the Lackawanna. The Oswego and Syracuse Railroad was leased in February, 1869. The Valley Railroad between Great Bend and Binghamton, a link in the main line, was also started in 1869.

In April, 1870, the Greene Railroad and the Utica, Chenango and Susquehanna Valley were leased.

In 1873, the Lackawanna and Bloomsburg Railroad, between Scranton and Northumberland, which line served the upper anthracite fields south of Scranton, was acquired by the Lackawanna.

In 1882, the largest single link in the Company, the New York, Lackawanna and Western Railroad Company, extending from Binghamton to Buffalo — two hundred miles — was thrown open to traffic. This latter link established the Company as a trunk line railroad, providing direct rail service between the Atlantic Seaboard and the Niagara Frontier.

The Modern Railroad

In addition to the main line extending from Hoboken to Buffalo, the Company operates 561 miles of branch

lines. Chief of these are the branches running from Scranton to Bloomsburg and Northumberland, from Binghamton to Syracuse, Oswego and Utica, and from Owego to Ithaca.

The entire main line of the road is of multiple track construction and it is laid with heavy-section rail. From Hoboken to Dover, the area of densest traffic, there are three tracks via much of the Newark-Dover line and on the Boonton line.

Among the Company's notable engineering achievements are Tunkhannock Viaduct, largest concrete viaduct in the world, nineteen miles west of Scranton, and Pequest Fill, greatest railroad embankment in the world, near Slateford Junction, New Jersey.

The rolling stock includes 310 locomotives, 711 passenger cars, 519 company cars, and 16,785 freight cars of all classifications.

The Marine Department operates 177 tugs, lighters,



barges, coal and grain boats and auxiliary equipment. This department, operating nine ferry boats, transports daily thousands of passengers across the Hudson River. About 625 marine employes are required to operate the floating equipment.

The Lackawanna has important freight terminals at Hoboken, also piers on both sides of the Hudson River, on the Harlem River, the East River and in Brooklyn, serving shippers and receivers in the Metropolitan area. At Buffalo, on Lake Erie, and at Oswego, on Lake Ontario, the Company also operates port and terminal facilities.

Two ticket offices in New York City in addition to passenger terminals at Christopher Street and Barclay Street, provide convenient service for the traveler. The

Company's centrally located passenger station in Buffalo is used by the Nickel Plate and the Baltimore and Ohio railroads.

The largest freight and passenger terminals on the railroad are in Hoboken. They cover 225 acres. The passenger terminal is served by seventeen tracks and six ferry slips. The freight terminal, bordering on the Hudson River, has a capacity of 3,100 cars.

Lackawanna Terminal Warehouse, bordering on the freight yards in Jersey City, is a fire-proof structure containing more than 1,250,000 square feet of space.

The commuter traffic of the Lackawanna is among the densest anywhere. Each business day more than 70,000 passengers are transported to and from New York.

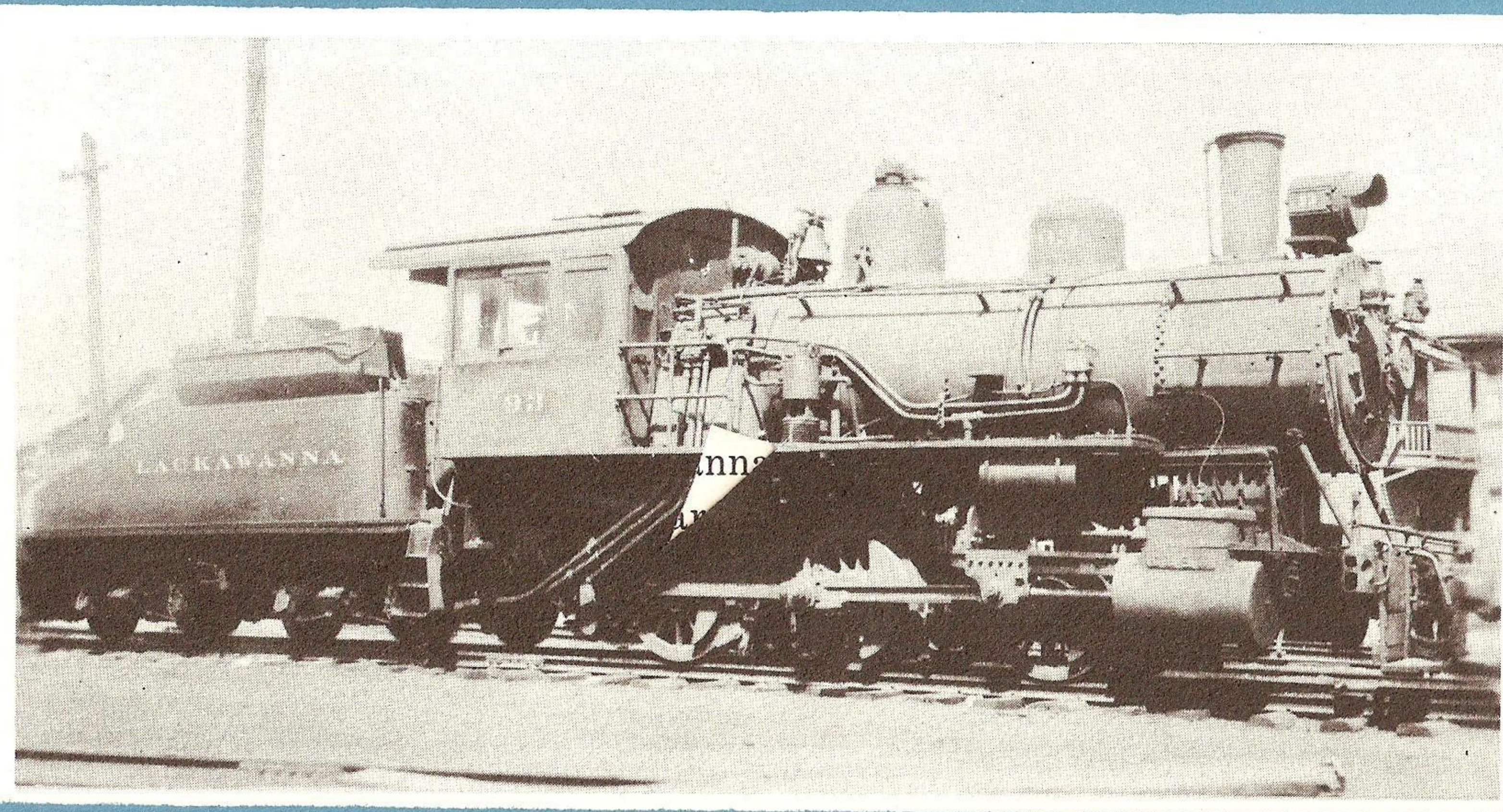
Contemporary Motive Power

of the Delaware, Lackawanna and Western Railroad Company

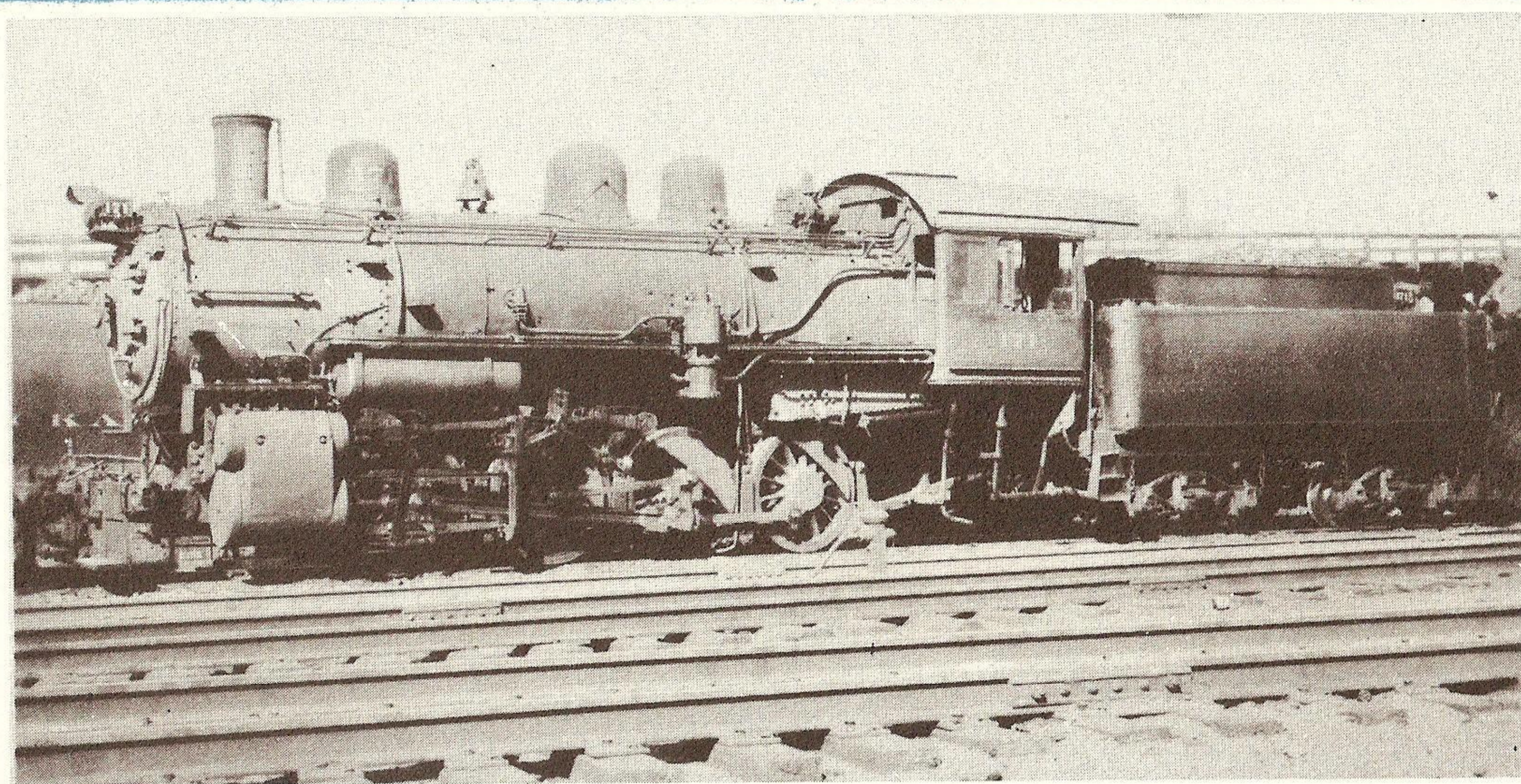
SWITCHING SERVICE

A. No. 93... Built 1903

A light six-wheel switcher used in making up trains, serving industrial plants and yards. This locomotive was built in Paterson, N. J., at the Cooke Works. Cylinders 19 inches x 24 inches, diameter of driving wheels 51 inches, weight of engine 129,224 lbs., boiler pressure 170 lbs.



SWITCHING SERVICE



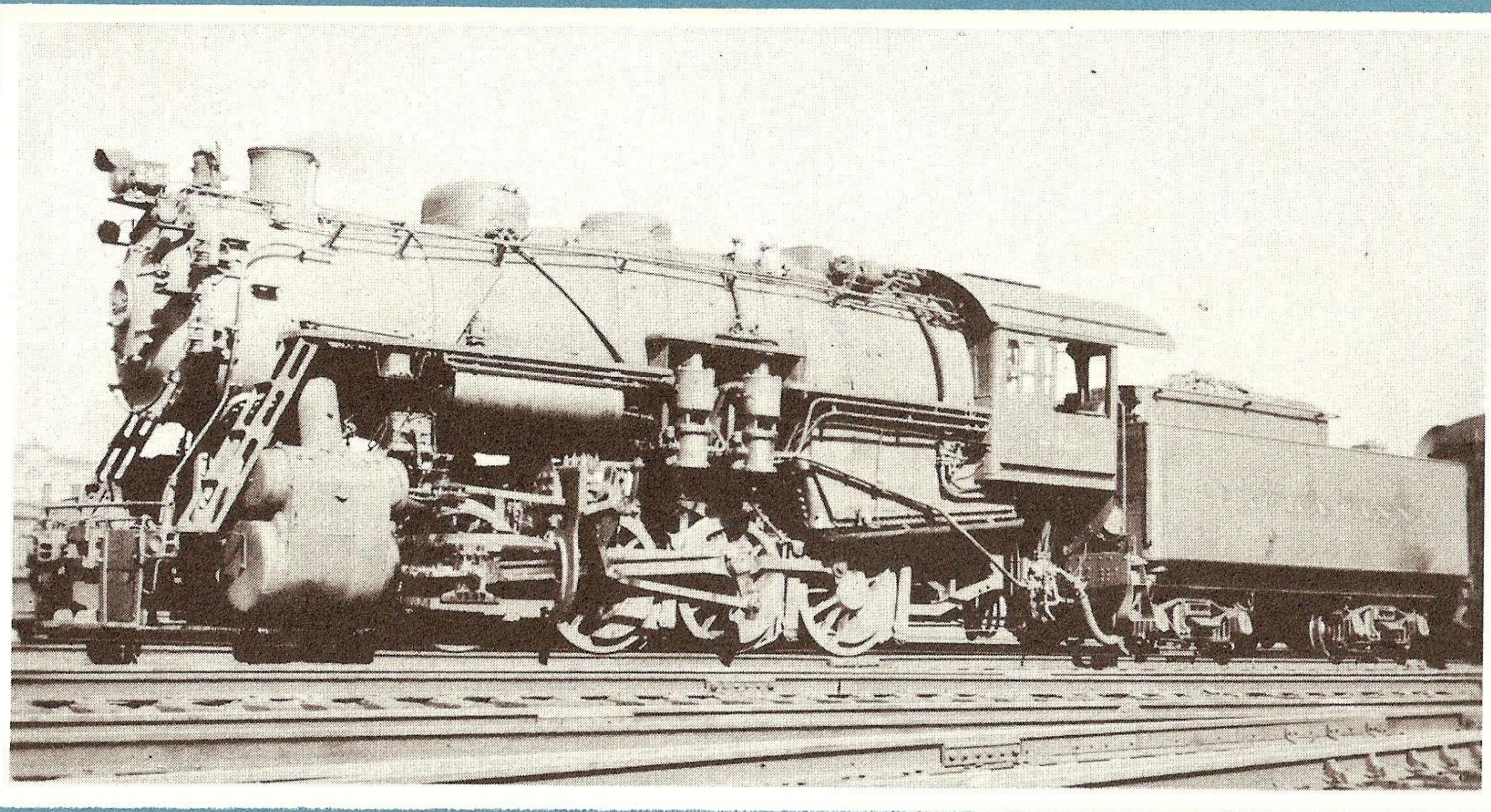
B. No. 171...Built 1914

This eight-wheel switch engine is used in transfer work, and in making up and breaking up freight trains. It is occasionally used to switch passenger equipment. The locomotive was built by the Lackawanna at its Scranton Shops. Cylinders 22 inches by 28 inches, diameter of driving wheels 57 inches, weight of engine 208,000 lbs., boiler pressure 200 lbs.

SWITCHING SERVICE

C. No. 242... Built 1934

An interesting, heavy, eight-wheel switch engine used primarily for heavy-duty switching in freight yards. This locomotive was designed by the Lackawanna's mechanical forces and built in the Company's shops at Scranton, from an old 2-8-2 (Mikado) type locomotive No. 1214, cylinders 27 inches by 30 inches, diameter of driving wheels 58 inches, weight of engine 266,600 lbs., boiler pressure 210 lbs.



SWITCHING SERVICE

D. No. 479... Built 1945

1,000 h.p. Diesel electric switching locomotive built by American Locomotive Company. Used for heavy switch and drag service. Also, can be used as combination switching and road freight locomotive on branch lines.

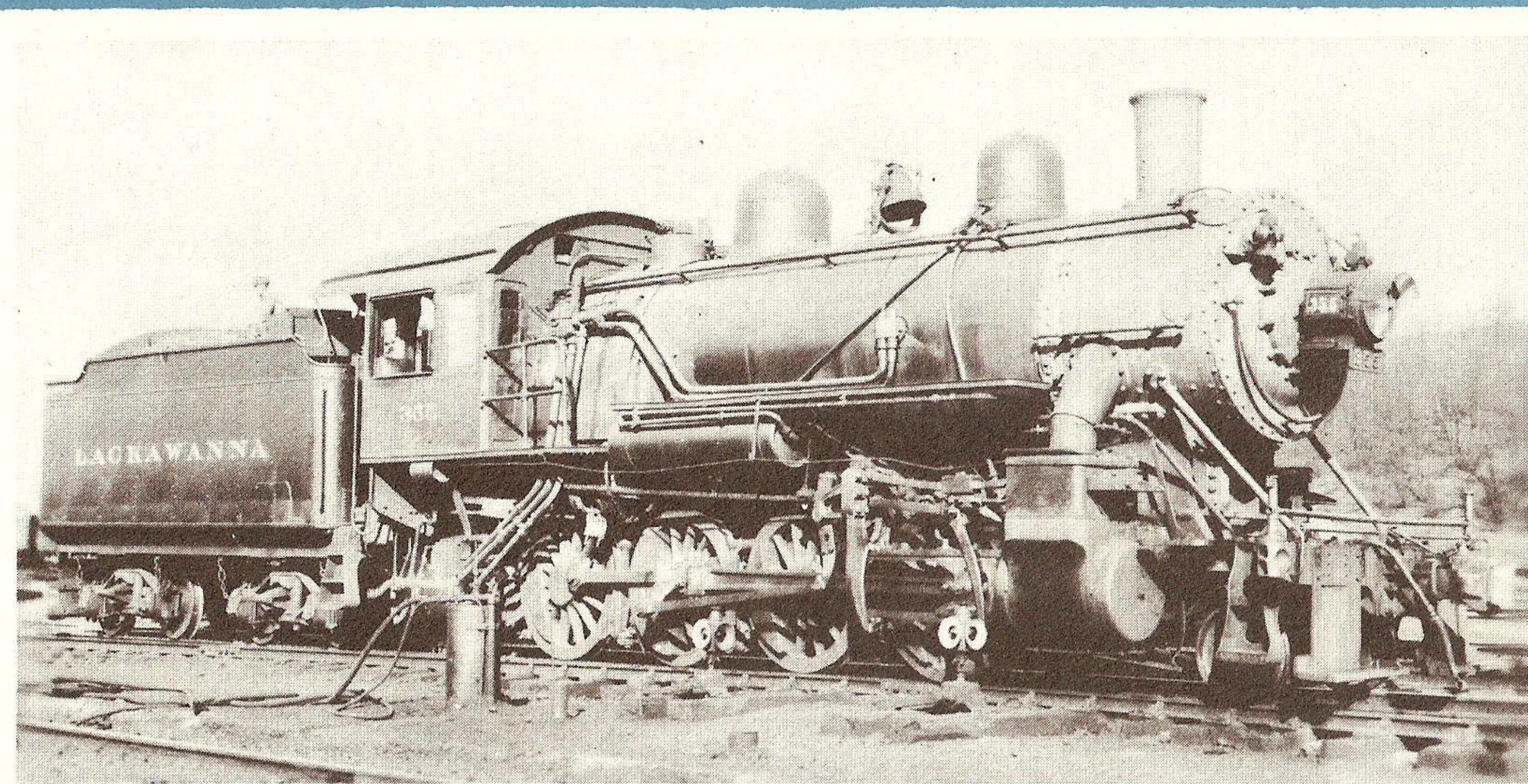
When locomotive arrives at terminal, with freight train, it can be used in switching service until returned to originating terminal, hauling another road freight train. This locomotive is equipped with six cylinders 12½ inches x 13 inches, 750 r.p.m. Weight in working order: 230,000 lbs. Tractive effort: starting: 69,000 lbs. Continuous: 34,000 lbs., at 8 m.p.h. Maximum speed: 50 m.p.h.



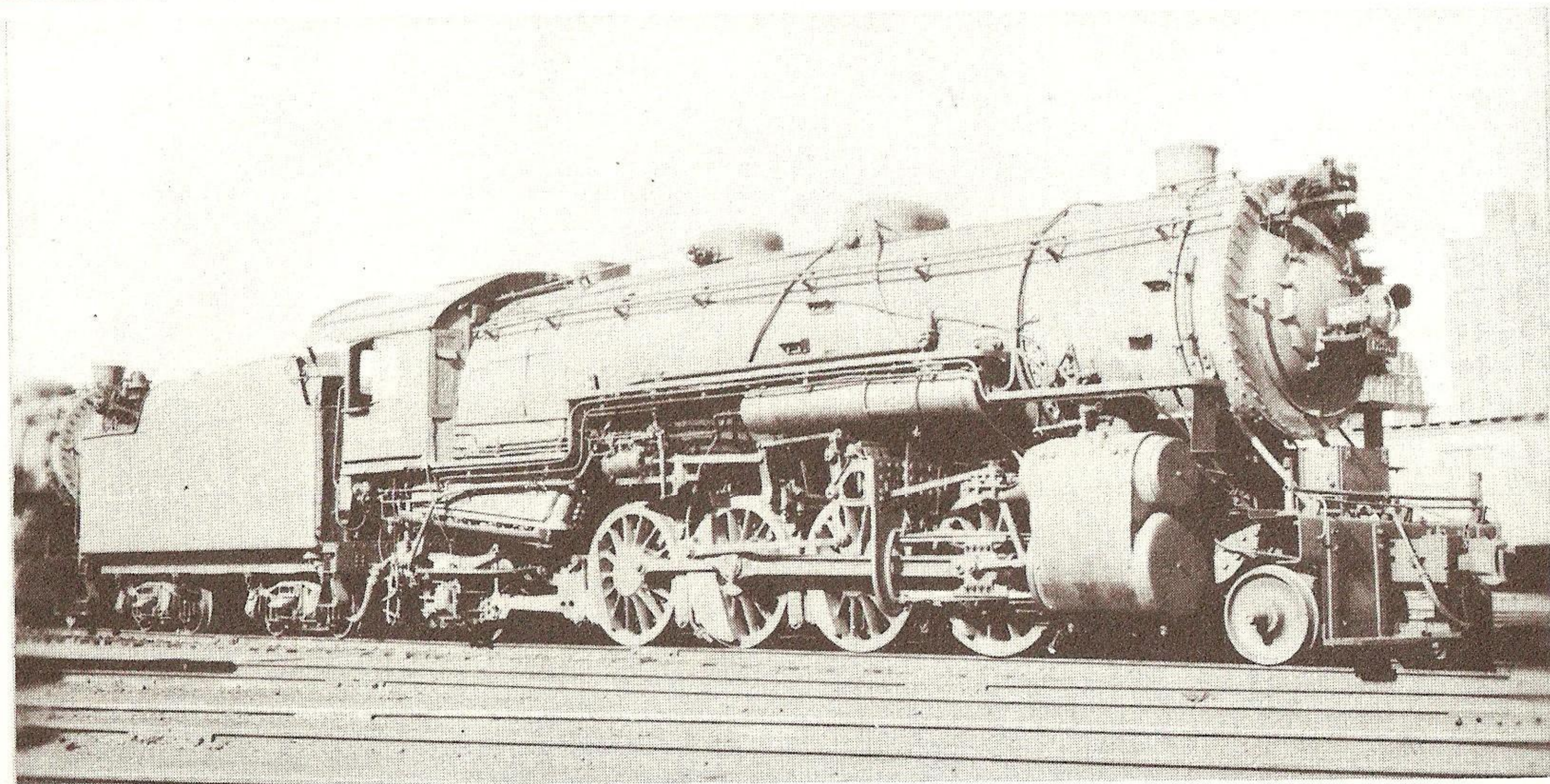
FREIGHT SERVICE

E. No. 355...Built 1910

A light 2-8-0, or "Consolidation," type locomotive used on branch lines, industrial sidings, freight pickup service, or for general utility purposes when a light freight engine is desired. Certain jobs require something lighter than a heavy modern locomotive. The 355 does those jobs on the Lackawanna. It was built by the Schenectady Works of the American Locomotive Company. Modernization was achieved by the application of a superheater and other appliances designed to increase efficiency.



FREIGHT SERVICE



F. No. 1252... Built 1918

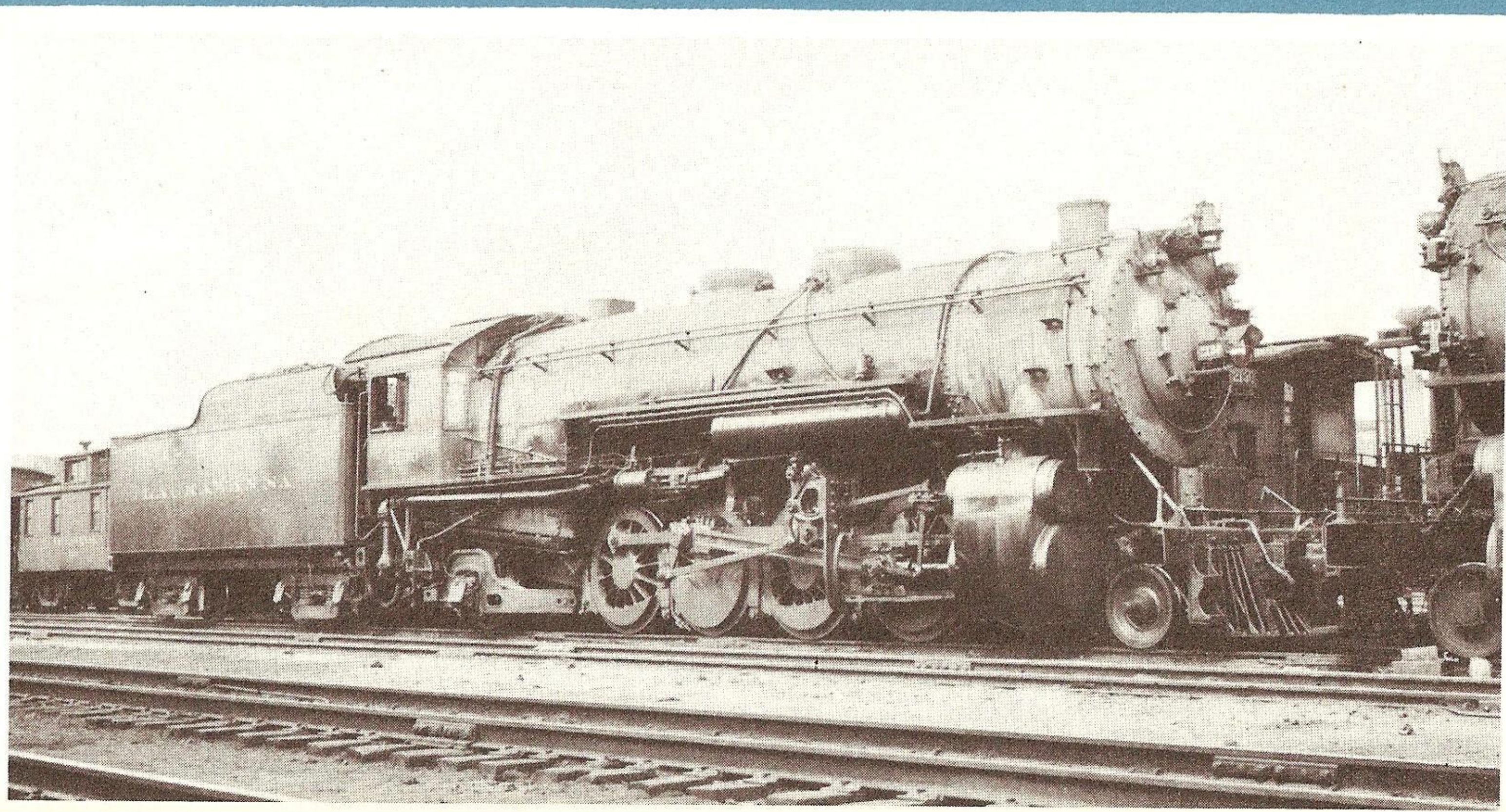
A heavy 2-8-2, or "Mikado," type locomotive, used in pickup service, mine runs, switching, transfer and as a helper-engine on heavy grades. This engine was built at the Schenectady Works of the American Locomotive Company. Cylinders: 28 inches by 30 inches, diameter of driving wheels 63 inches, weight on driving wheels 254,500 lbs., weight of engine 321,000 lbs., boiler pressure 200 lbs.

FREIGHT SERVICE

G. No. 2130...Built 1923

Large 2-8-2 type freight locomotive, originally used in heavy slow freight service on main line, and Pusher service. These locomotives have been replaced with 3,000 h.p. Diesel pusher locomotives and are now used for short haul, heavy slow freight trains over branch lines.

Locomotives were built by American Locomotive Company in 1922-1924. Cylinders: 28 inches by 32 inches. 200 lbs. steam pressure, and develop tractive power 67,700 lbs. Driving wheels 63 inch diameter. Total weight of engine 356,500 lbs. Weight on drivers 271,500 lbs.



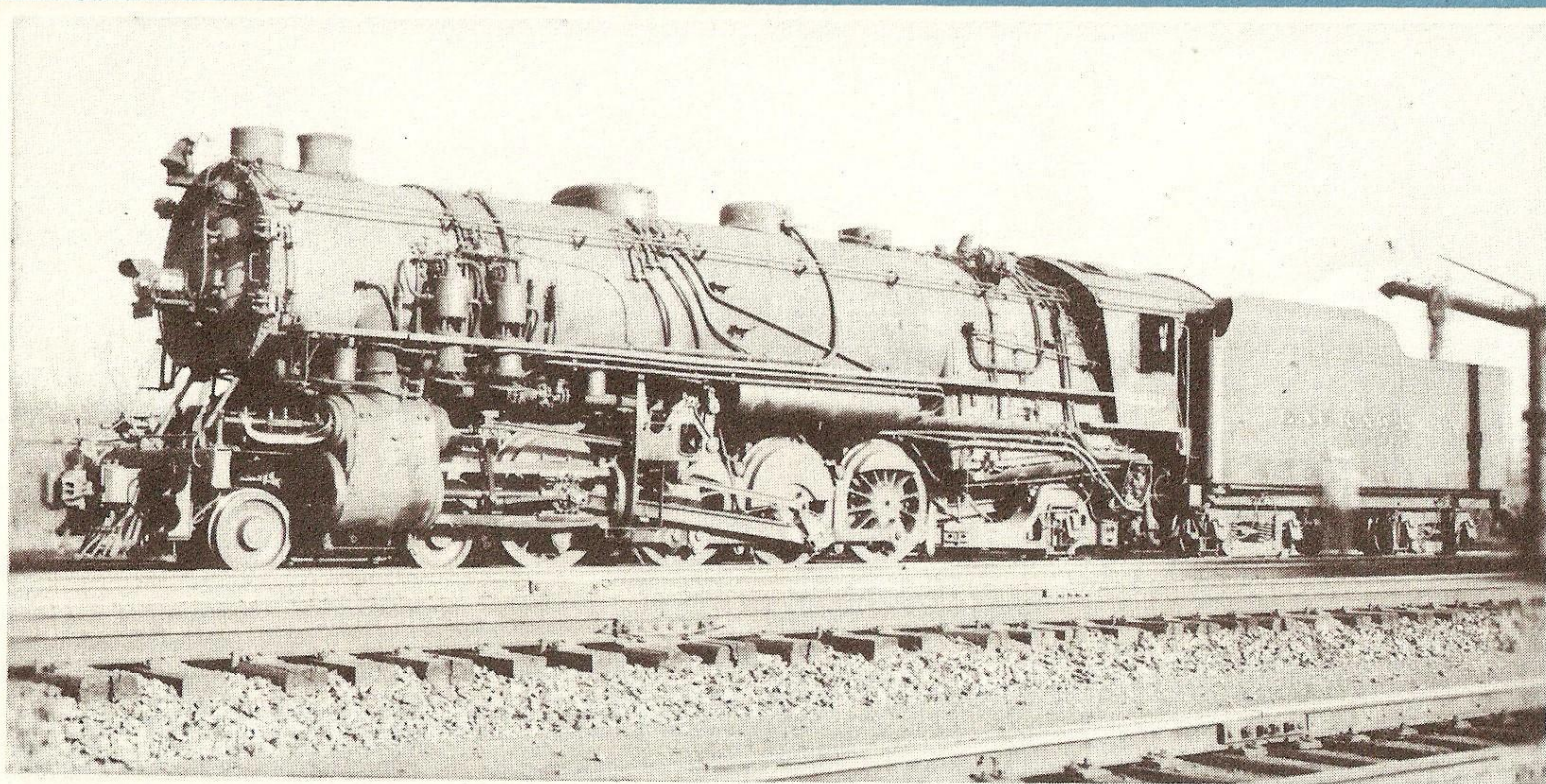
FREIGHT SERVICE

H. No. 2223... Built 1926

An unusual 4-8-2 or "Mountain" type. It has three cylinders instead of two, the number generally used on locomotives. The extra cylinder creates a more even torque or pull, and adds about fifty percent to the power of the engine.

This type locomotive was originally used in heavy main line slow freight service, and as helper engines on freight trains over steep grades. Diesel freight locomotives have replaced these 3-cylinder locomotives in main line and Pusher service, and they are now used in branch line service for movement of heavy coal trains.

This locomotive was built at the Schenectady Works. Cylinders on the outside of engine 25 inch dia. by 32 inch stroke. The third cylinder between the frames is 25 inch diameter by 28 inch stroke. Diameter of driving wheels: 63 inches. Weight on drivers: 275,000 lbs. Weight of engine: 395,000 lbs. Working pressure: 200 lbs.

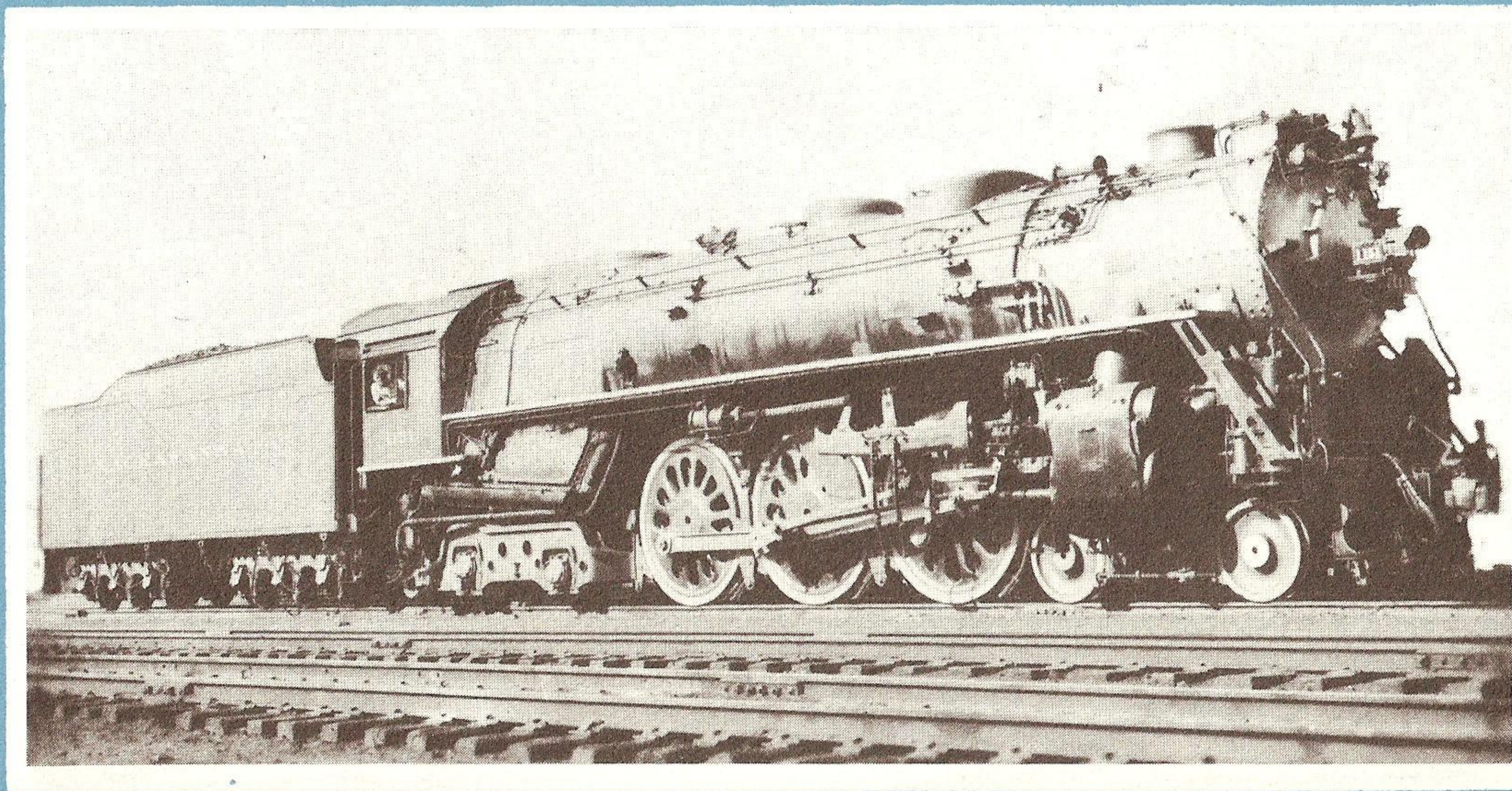


PASSENGER SERVICE

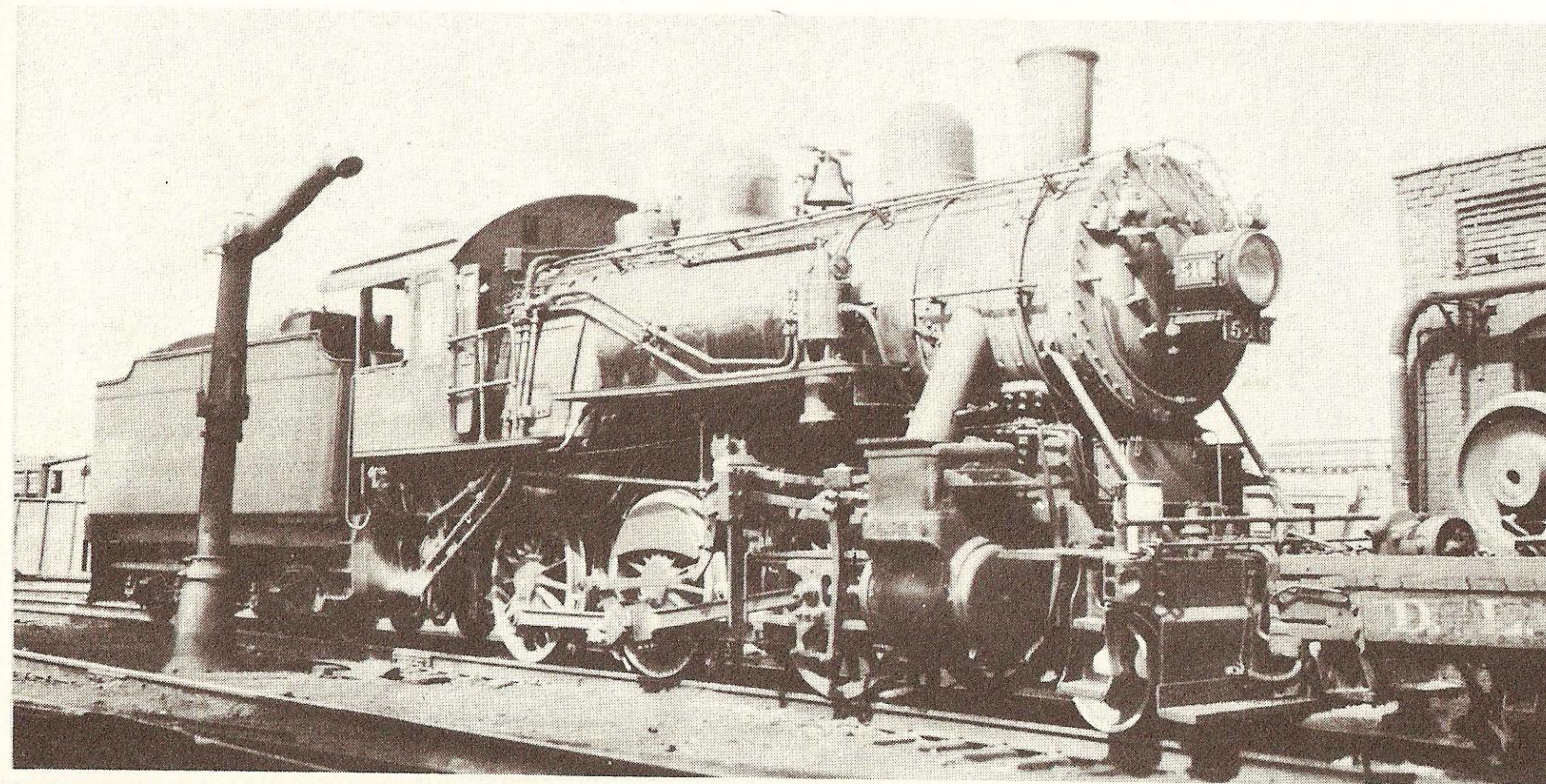
I. No. 1151...Built 1937

This 4-6-4 type locomotive is of modern design, and suitable for high speed service, with hauling capacity to handle 11-car train, Scranton-Buffalo, without assistance. It, likewise, can handle trains of considerable tonnage over the heavy grades of the Poconos.

Built at Schenectady Works. Cylinders: 26 inch dia. by 30 inch stroke. Driving wheels: 80 inch dia. Boiler pressure: 225 lbs. Weight on drivers: 198,000 lbs. Total weight of engine: 375,000 lbs.



SWITCHING SERVICE



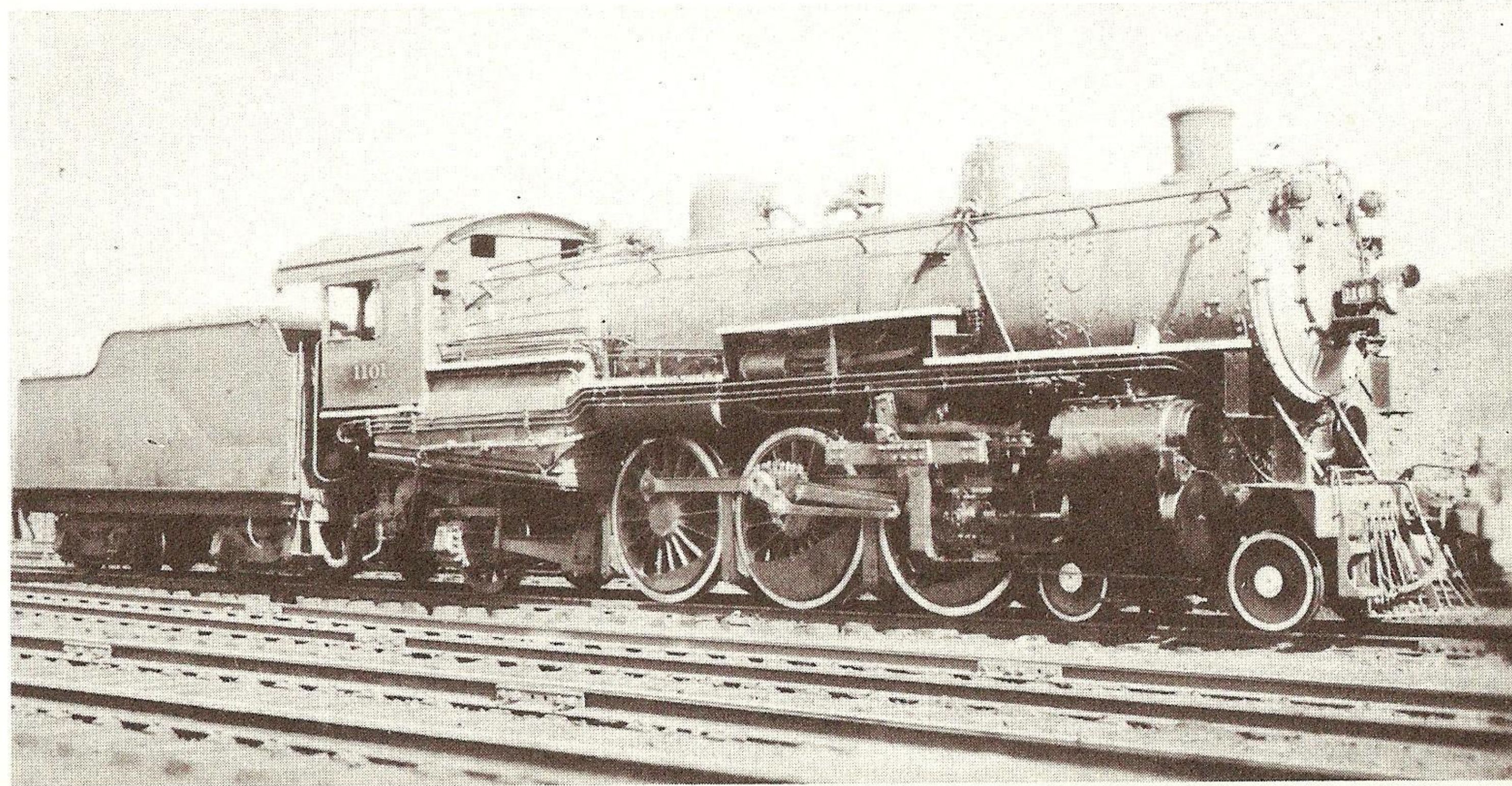
J. No. 546... Built 1909

Small general-utility locomotives of this type are too light for service on the main line. They operate on branch lines and industrial sidings where light rail and roadbed preclude the use of larger locomotives. This engine was built by the American Locomotive Company at its Schenectady plant. It is of the 2-6-0, or "Mogul," type, with cylinders 20½ inches by 26 inches, diameter of driving wheels 63 inches, weight of engine 171,500 lbs., boiler pressure 200 lbs.

PASSENGER SERVICE

K. No. 1101...Built 1912

This 4-6-2, or "Pacific," type locomotive, the first of its kind used on the Lackawanna, was designed to burn anthracite. It was originally used on through main-line trains until their increasing weight exceeded its capacity. The engine was then used on branch lines and today handles commuters between Washington, N. J., and Hoboken. It was built at the Schenectady Works, cylinders 25 inches by 28 inches, diameter of driving wheels 73 inches, weight on driving wheels 179,500 lbs., weight of engine 284,000 lbs., boiler pressure 200 lbs.



FREIGHT AND PASSENGER SERVICE

M. No. 802...Built 1946

4,500 h.p., 3-Unit Diesel passenger locomotive. This type of motive power is now used to haul passenger trains over the main line.

When these locomotives were placed in service, it was possible to reduce the running time between New York and the Great Lakes, and maintain fast schedules over the mountainous grades. The running time between Hoboken and Buffalo is 8½ hours.

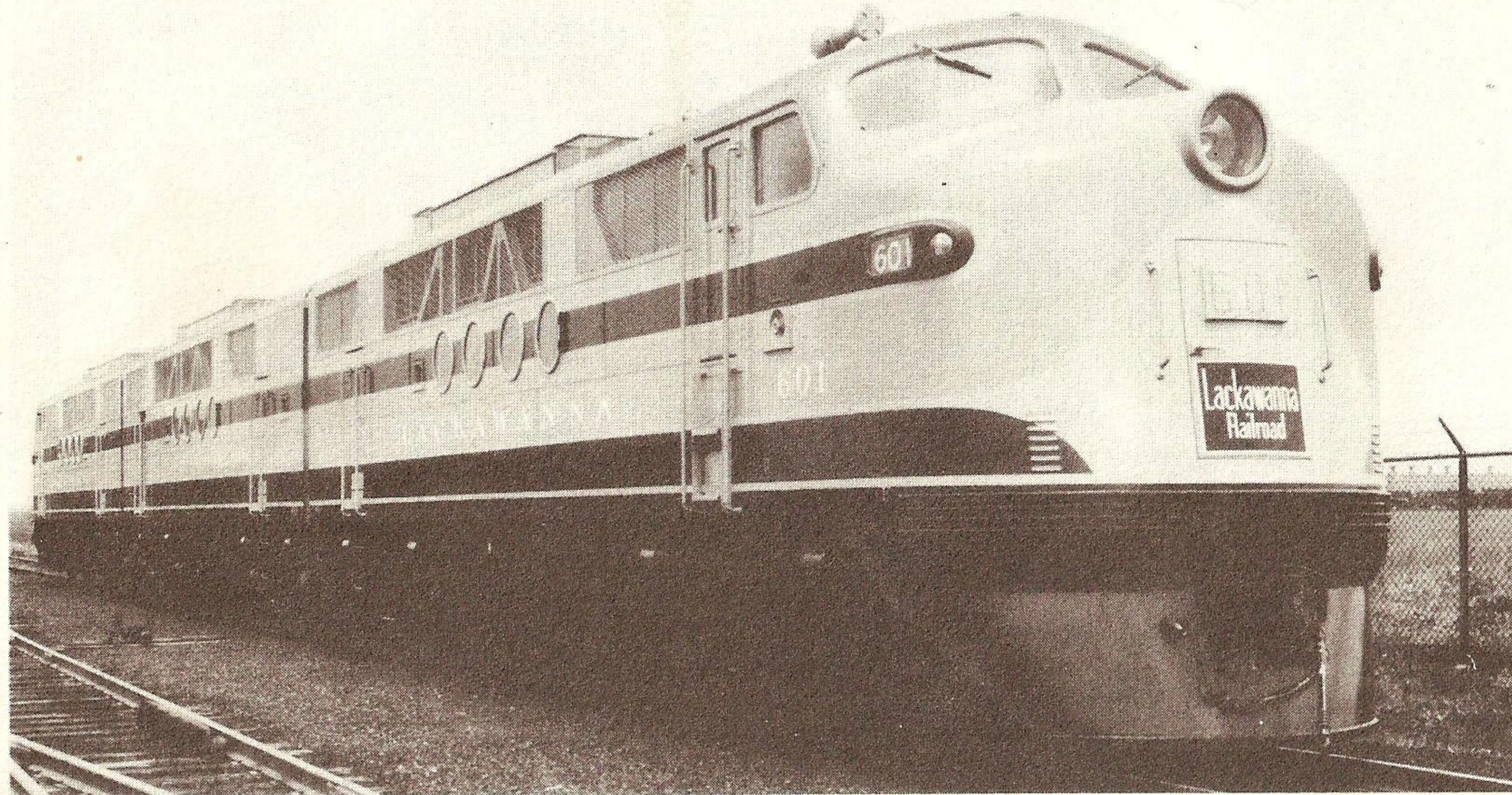
These locomotives were built by Electro-Motive Division in 1946. Each unit is equipped with sixteen cylinders, 2 cycle Diesel engine, direct connected to generator, which furnishes power to operate traction motors. Each driving axle is equipped with traction motor. Tractive effort, starting: 175,860 lbs., continuous: 71,000 lbs. at 21 m.p.h. Weight in working order: 734,990 lbs.



FREIGHT AND PASSENGER SERVICE

N. No. 601 . . . Built 1945

Diesel road freight locomotive, 4,050 h.p., consisting of three 1,350 h.p. units, and arranged for double end operation. This type power used to haul fast freight trains on main line. Each unit of Diesel locomotive is equipped with sixteen 2-cycle $8\frac{1}{2}$ inch x 10 inch cylinders. Diesel engine direct connected to D.C. generator which provides power to traction motors direct connected to each driving axle: Gear ratio: 62:15 with maximum speed 65 m.p.h. Tractive power, starting: 168,500 lbs., continuous: 90,000 lbs. Total weight in working order: 692,200 lbs. Built by Electro-Motive Division, General Motors Corp.

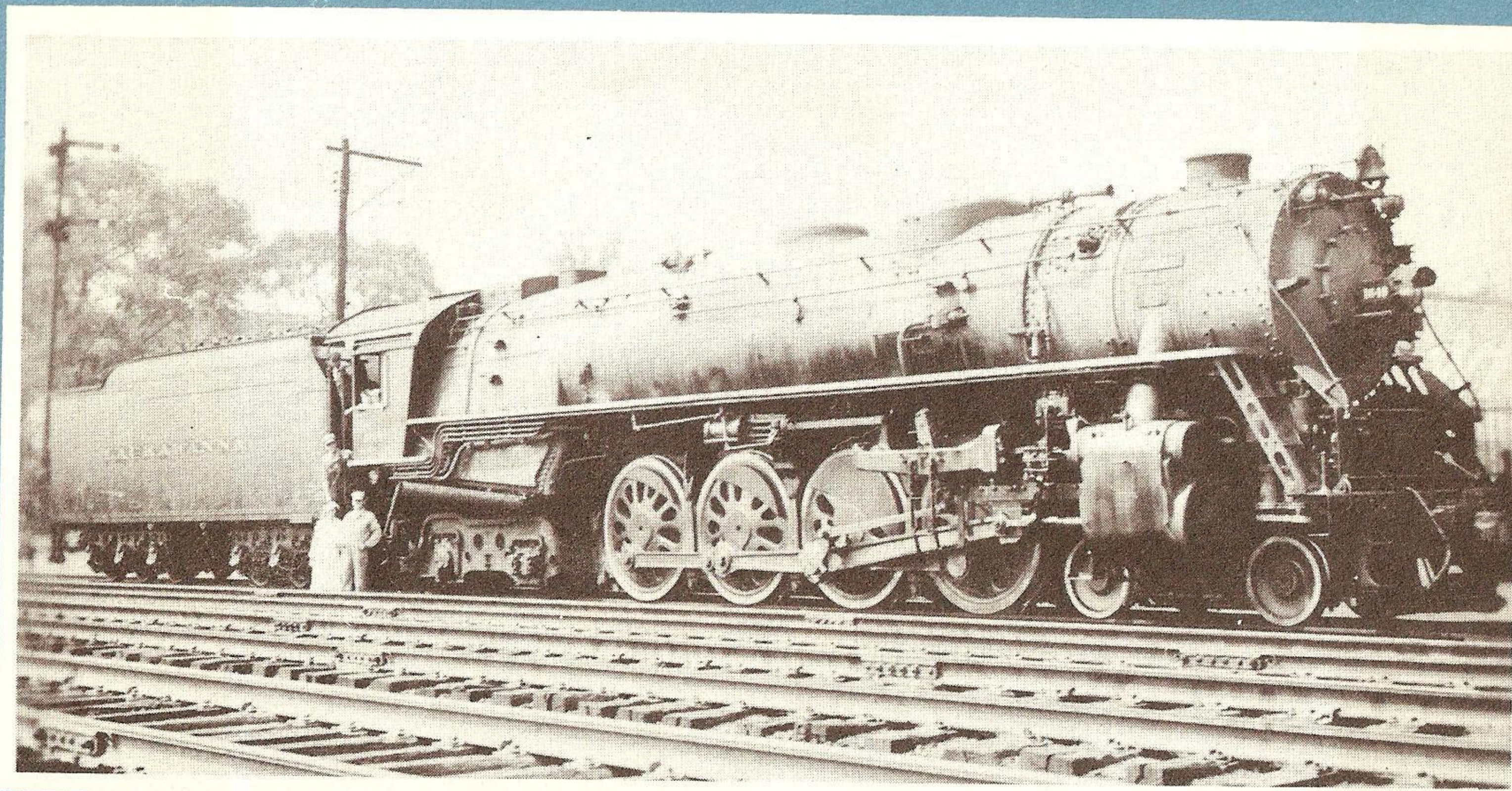


FREIGHT AND PASSENGER SERVICE

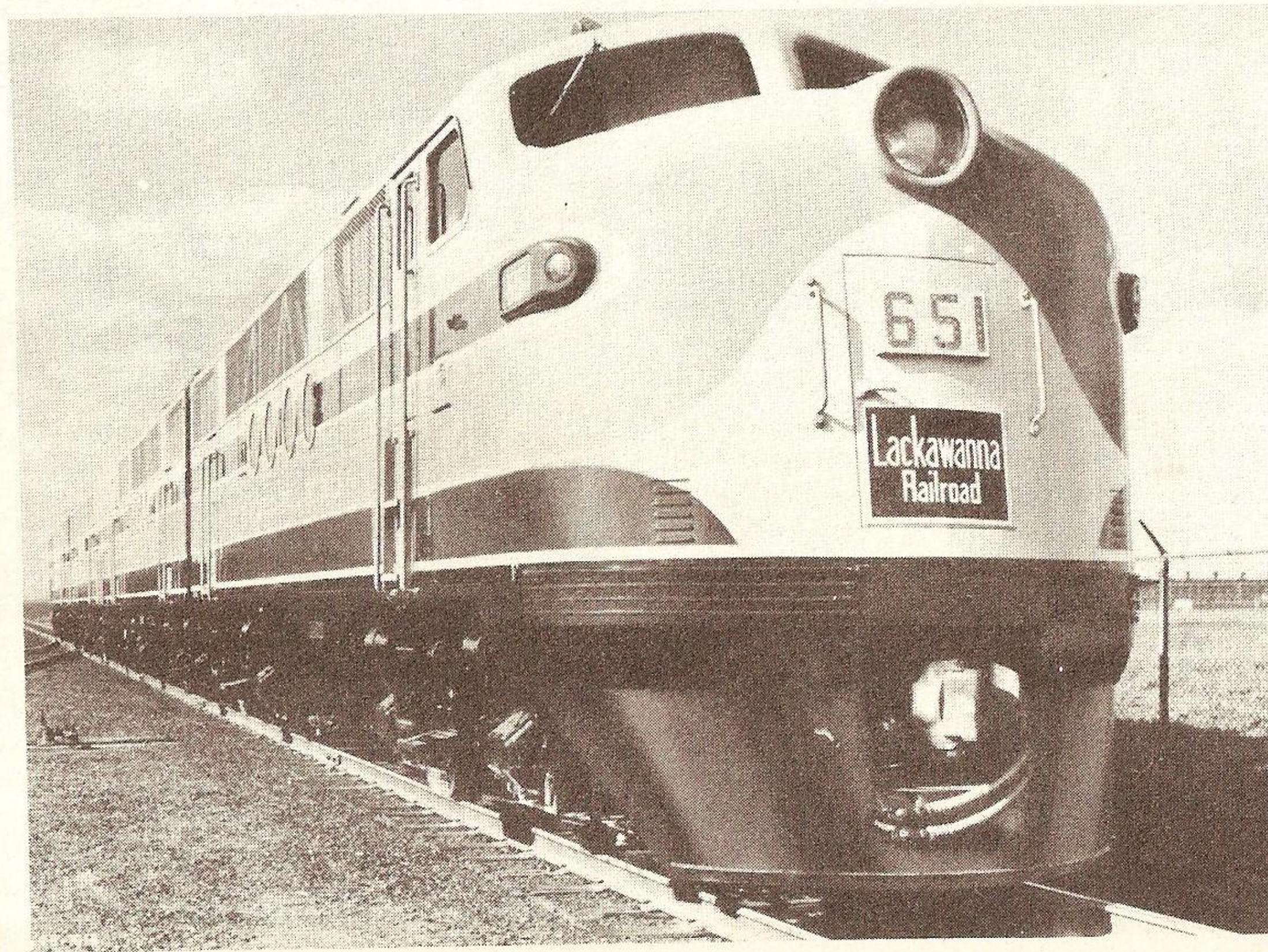
O. No. 1649...Built 1934

Large 4-8-4 type modern locomotive that can be used as passenger locomotive, but is usually assigned to heavy fast freight service on main line. All engine axles fitted with roller bearings.

Built at Schenectady Works. Cylinders 28 inches x 32 inches. Diameter of driving wheels 74 inches. Weight of engine: 447,000 lbs. Boiler pressure: 230 lbs.



FREIGHT AND PASSENGER SERVICE



P. No. 651... Built 1945

Diesel road freight locomotive 2,700 h.p., consisting of two 1,350 h.p. units, single end operation. This type of power is used for assisting tonnage freight trains over the major grades. This Diesel locomotive (2 units) can haul 160% of maximum rating hauled by 4-8-4 type steam locomotive in Pusher service. This Diesel is also used for hauling freight trains over main line.

Built by Electro-Motive Division of General Motors Corporation. Each unit has sixteen 2-cycle 8½ inch x 10 inch cylinders. Diesel engine direct connected to D.C. generator which provides power for traction motors directly connected to each driving axle.

Gear ratio: 65:12 with maximum speed 50 m.p.h. Tractive power, starting: 112,640 lbs., continuous: 80,000 lbs. at 12 m.p.h. Total weight in working order: 461,590 lbs.

The Return of Phoebe Snow

Back at the turn of the century, when railroad travel was "in plush," although less refined than the service of to-day, an auburn-haired maiden, garbed in immaculate white and adorned by a dainty corsage of violets, made her bow on the American scene.

Her name was Phoebe Snow. And her sparkling-white dress and hat symbolized cleanliness of travel on the Lackawanna Railroad. The Lackawanna of those days was one of the few railroads whose locomotives took the "sin" out of cinders by burning hard coal instead of soft coal.

Penrhyn Stanlaws and other celebrated portrait artists glorified Miss Phoebe Snow with palette and canvas. Vaudeville vocalists sang her praises. Poets and wags, too, contributed to Phoebe Snow's popularity. Advertisements, set to rhyme and illustrated with action pictures of Miss Phoebe, appeared in profusion in street-cars, in magazines and in newspapers.

Typical of these verses was the one in which Phoebe admitted:

*"I won my fame and wide acclaim
For Lackawanna's splendid name
By keeping bright and snowy white
Upon the Road of Anthracite."*

But when Phoebe Snow had reached her peak of popularity someone started a war—the first of the two World Wars. Then the Government took over the railroads, which were ordered to burn soft coal. That order restored the forgotten cinders and grime of Lackawanna travel. Phoebe Snow and her garb of dainty white disappeared from the scene for 27 long years.

It was not until 1944, during the second World War, that Phoebe Snow was "reincarnated" by the Lackawanna. She reappeared in Lackawanna advertisements, reeling off jingles as in the old days. This time Miss Phoebe extolled the Grade A job her railroad was doing in the war effort. Gone were the debonair white hat and gown, also the pert bouquet of violets. The new Phoebe Snow—lovelier than ever—made her wartime debut bedecked in natty service uni-

PHOEBE SNOW — 1904



PHOEBE SNOW — TODAY



form and jaunty overseas cap. Today, new equipment bears the legend, "Lackawanna—the Route of Phoebe Snow." And like "Granny," an ultra-modern Phoebe Snow in glorified white uniform, soon will break forth in verse again to tell the story of Lackawanna's new super-speed Diesel locomotives and of its streamlined, air-conditioned trains which will provide clean, smooth-riding, speedy and *safe* travel.

Lackawanna

THE ROUTE OF PHOEBE SNOW

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